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IBM CORPORATION			RUTTEN, JAMES D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/631,925	Applicant(s) ARIDOR ET AL.	
	Examiner J. Derek Rutten	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Applicant's submission filed 10/25/07, responding to the 6/25/07 Office action which detailed the rejection of claims 1-21. Claims 1, 11, and 21 have been amended, and new claim 23 has been added. Claims 1-21 and 23 remain pending in the application and have been fully considered by the examiner.

Response to Arguments

2. Applicant's arguments, see pages 11 and 12, filed 10/25/07, with respect to the rejection(s) of claim(s) 1-21 under 35 U.S.C. § 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of "Version Management with CVS" by Per Cederqvist.

3. In response to applicant's argument that Bartz is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bartz is directed to code maintenance issues, which is in the field of applicant's endeavor. Therefore, Applicant's argument is not persuasive.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **1-5, 8-15** and **18-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartz et al., US 7,131,112 (hereinafter **Bartz**) in view of Thomas, US 2003/0167446 (hereinafter **Thomas**), in view of "Version Management with CVS" by Per Cederqvist (hereinafter **Cederqvist**).

In regard to claim **1**, **Bartz** discloses:

- *"A method for adapting a standard code base..."* (E.g., see Figure 2 & Column 4, lines 29-31), wherein a method for differencing of two or more documents to determine conflicts among different version, and for other purposes is disclosed.
- *"...parsing a modified version of a first release of a standard code base to generate a canonically-parsed representation of the modified version..."* (E.g., see Figure 3 & Column 5, lines 10-35), wherein character-level differencing pinpoints the actual characters or symbols that differ between the documents or source code.
- *"...generating difference data representative of changes made to...the standard code base using the parsed of the modified version..."* (E.g., see

Figure 3 & Column 6, line 61 – Column 7, line 4), wherein differences between the input documents are identified.

- “...*the first release of...*” (E.g., see Figure 4 & Column 9, lines 31-34), wherein the reference document is a previous release (first release).
- “...*and using the difference data in applying the changes made to the first release of the standard code base to a second release of the standard code base.*” (E.g., see Figure 7, box 732 & Column 8, line 60 – Column 9, line 13), wherein the changes are applied (box 732) in the specified set.

But **Bartz** does not expressly disclose “canonically parsed representation” of the code or programs. However, **Thomas** discloses:

- “...*canonically parsed representation...*” (E.g., see Figure 3, diamond 34 & paragraph [0039]), wherein semantic differences are disclosed.

Bartz and **Thomas** are analogous art because they are both concerned with the same field of endeavor, namely, a differencing process comprising two documents. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Bartz**’s canonically parsed representation with **Thomas**’s canonical parsing. The motivation to do so would have been to expose the semantics of the changes as taught by **Bartz** (E.g., see Column 5, lines 18-20).

Bartz and **Thomas** do not expressly disclose: *wherein the modified version is adapted from the first release of the standard code base by an entity other than that which developed the first release of the standard code base, and for the purpose of adapting the first release of the standard code base to operate on a particular type of computer; ... to generate a modified*

version of the second release of the standard code base that adapts the second release of the standard code base to operate on the particular type of computer. However, **Cederqvist** teaches:

- *wherein the modified version is adapted from the first release of the standard code base by an entity other than that which developed the first release of the standard code base, and for the purpose of adapting the first release of the standard code base to operate on a particular type of computer; See*

Cederqvist page 2 paragraph 1:

If you modify a program to better fit your site, you probably want to include your modifications when the next release of the program arrives.

Note that **Cederqvist's** "site" is reasonably broadly interpreted as a "particular type of computer."

- *to generate a modified version of the second release of the standard code base that adapts the second release of the standard code base to operate on the particular type of computer. See **Cederqvist** page 2 paragraph 1, e.g.*

"include your modifications when the next release of the program arrives."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use **Cederqvist's** third-party modifications with **Bartz'** difference data in order to include first release modifications in a "next release" as suggested by **Cederqvist**.

In regard to claim 2, the rejections of base claim 1 are incorporated. Furthermore, **Bartz** discloses:

- “...parsing an unmodified version of the first release of the standard code base to generate a ...parsed representation of the unmodified version wherein generating the difference data includes comparing the ...parsed representations of the unmodified and modified versions of the first release of the standard code base.” (E.g., see Figure 4 & Column 9, lines 31-34), wherein the reference document is a previous release (first release) and the changes (differences) are identified.

In regard to claim 3, the rejections of base claim 1 are incorporated. Furthermore, **Bartz** discloses:

- “...parsing...the standard code base to generate a canonically-parsed representation of the intermediate version, wherein generating the difference data includes comparing the canonically-parsed representations of the intermediate and modified versions of the first release of the standard code base.” (E.g., see Figure 3 & Column 5, lines 10-35), wherein character-level differencing pinpoints the actual characters or symbols that differ between the documents or source code.

But, **Bartz** does not expressly disclose “...an intermediate version of the first release...”. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to difference between any two versions including an intermediate version of the first release and the first release. The motivation to do so was disclosed by **Bartz** (E.g., see Column 8, lines 64-65) wherein changes are between two versions of a project. Additionally, **Bartz** teaches enlistment files (see Figure 8, Column 9, lines 46-66) which are intermediate files.

In regard to claim **4**, the rejections of base claim **3** are incorporated. Furthermore, **Bartz** discloses:

- “...*the intermediate version of the first release of the standard code base is generated using automated source transformation, and wherein the modified version of the first release of the standard code base is generated by applying manual changes to the intermediate version of the first release of the standard code base.*” (E.g., see Figure 4 + 4a & Column 6, line 30 – Column 7, line 6), wherein the developers manual changes are automatically merged into the code base (first release).

In regard to claim **5**, the rejections of base claim **1** are incorporated. But, **Bartz** does not expressly disclose “...*wherein generating the difference data includes identifying a plurality of changed semantic components...*”. However, **Thomas** discloses:

- “...*wherein generating the difference data includes identifying a plurality of changed semantic components...*” (E.g., see Figure 3, diamond 24 & paragraph [0039]), wherein semantic differences are identified between two documents.

In regard to claim **8**, the rejections of base claim **5** are incorporated. Furthermore, **Bartz** discloses:

- “...*includes notifying a user of a change in a changed ... component.*” (E.g., see Figure 4A & Column 6, line 67- Column 7, line 6), wherein a user is notified (alerted) to a possible conflict among a change.

In regard to claim **9**, the rejections of base claim **5** are incorporated. But, **Bartz** does not expressly disclose “...*includes automatically applying a change in a changed semantic component to the second release of the standard code base.*”. However, **Thomas** discloses:

- “...*includes automatically applying a change in a changed semantic component to the second release of the standard code base.*” (E.g., paragraph [0108] + [0109]), wherein a changed semantic component is automatically applied.

In regard to claim **10**, the rejections of base claim **1** are incorporated. But, **Bartz** does not expressly disclose “...*using the difference data in applying the changes made to the first release of the standard code base to a third release of the standard code base.*”. However, **Thomas** discloses:

- “...*using the difference data in applying the changes made to the first release of the standard code base to a third release of the standard code base.*” (E.g., paragraph [0123]), wherein the appropriate delta file is applied to achieve the corresponding version.

In regard to claims **11-15** and **18-20**, this is an apparatus version of the claimed method discussed above, in claims **1-5** and **8-10**, respectively, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Bartz**, (Figure 1), wherein a memory, processor and program code resident in the memory to implement the process are taught.

In regard to claim **21**, this is a program product version of the claimed method discussed above, in claim **1**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Bartz**, (Figure 1).

In regard to claim **23**, the above rejection of claim **1** is incorporated. **Bartz** and **Thomas** do not expressly disclose: *wherein using the difference data in applying the changes made to the first release of the standard code base to the second release of the standard code base is performed by the entity that adapted the modified version after the second release has been released by the entity that developed the first release of the standard code base*. However, **Cederqvist** teaches:

- "...wherein using the difference data in applying the changes made to the first release of the standard code base to the second release of the standard code base is performed by the entity that adapted the modified version after the second release has been released by the entity that developed the first release of the standard code base" See page 5, e.g. "...merging the changes..."

As suggested in the above rejection of claim 1, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use **Cederqvist's** third-party modifications with **Bartz'** difference data in order to include first release modifications in a "next release" as suggested by **Cederqvist**.

6. Claims **6**, **7**, **16** and **17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bartz** in view of **Thomas** and further in view of Ziebell, US 6,385,768 (hereinafter **Ziebell**).

In regard to claim 6, the rejections of base claim 5 are incorporated. But, **Bartz** and **Thomas** do not expressly disclose “...*the change is selected from the group consisting of deletion, modification, addition and replacement.*”. However, **Ziebell** discloses:

- “...*the change is selected from the group consisting of deletion, modification, addition...*” (E.g., see Column 1, lines 55-57), wherein changes may represent features that have been added, deleted and modified.

Bartz, Thomas and **Ziebell** are analogous art because they are both concerned with the same field of endeavor, namely, a differencing process comprising two or more documents. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Ziebell's** change method with **Bartz and Thomas's** version control system to include changes selected from the group of deletion, modification, addition and replacement. One of ordinary skill in the art would have been motivated to include replacement because replacement is just a combination of deleting and adding or modifying. The motivation to do so would have been to manage the change to keep track of modifications in source code and other versioned documents across time and across multiple development groups working in parallel with each other as taught by **Bartz** (E.g., see Column 1, lines 34-37).

In regard to claim 7, the rejections of base claim 6 are incorporated. Furthermore, **Bartz** discloses:

- “...generating the difference data includes generating at least one XML file, the XML file including a tag for a changed semantic component, the tag identifying the changed semantic component and including an attribute representing the change made to the changed semantic component.” (E.g., see

Figure 3 & paragraph [0034]), wherein XML files including tags for a changed semantic component including attributes represent changes made.

In regard to claims **16 and 17**, this is an apparatus version of the claimed method discussed above, in claims **6 and 7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Bartz**, (Figure 1).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Derek Rutten/
Patent Examiner, AU 2192